

In the case of birds of prey the coming to maturity of Forestry Commission woodlands, the restocking with sheep and cattle of rough hill country and the making of extensive new sheets of water in the Highlands for hydro-electric purposes are among factors which may render possible a substantial expansion by some of the larger species which have been kept artificially at a low level of numbers recently.

Another urgent subject for scientific study is the actual experience of attempts at controlling wild bird populations. It is very doubtful whether some of these attempts have been justified either in their objects or by their effectiveness in attaining them and a disinterested assessment is desirable. Scientific bird protection cannot become a practical possibility until much more knowledge of the underlying problems has been gained. This contribution is intended merely to suggest certain lines of approach and to examine certain assumptions rather than to come to final conclusions, which would be premature at the present stage.

Taxonomic notes on the Lineated and the Green Barbets of India, with the description of a new race.

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Baker ⁽¹⁾ placed the Lineated Barbets and the Green Barbets in two separate species, namely, *Thereiceryx lineatus* (Vieillot) and *T. zeylanicus* (Gmelin), respectively. Ripley ⁽²⁾ synonymized *Thereiceryx* with *Megalaima*, but considered *M. lineata* and *M. zeylanica* to be conspecific. In spite of the admission of overlap of their ranges Peters ⁽³⁾ followed this treatment. Ripley ⁽⁴⁾ later justified this action by pointing out that they replace each other in all possible zones of overlap.

However, a collection of birds from the Simlipal Hills, Mayurbhanj district, Orissa, made by Mr. B. Biswas of the Zoological Survey of India, early in 1951, contains specimens of both Lineated and Green Barbets. These specimens were all with swelled gonads and were collected while feeding on the same tree. Going through the material in the collection of the Zoological Survey of India, and Mr. Biswas' notes, it became clear to me that both these Barbets also occur together in the Lower Central Nepal. There is no evidence of their hybridizing in the areas where they coexist.

Baker differentiated *M. lineata* from *M. zeylanica* on the character of the orbital skin and the presence or absence of feathers between the eye and the bill. The extension of the orbital skin is highly variable in *M. lineata*, from a small, not much extended condition to its extension up to the gape (like Baker's character for *M. zeylanica*). I am, therefore, unable to attach any taxonomic importance to this character. There are, however, other good diagnostic characters by which *M. lineata* and *M. zeylanica* can be distinguished. Such characters are tabulated below :—

	<i>M. lineata.</i>	<i>M. zeylanica</i>
Chin and throat	White.	Brown.
Head, neck and breast	Brown with prominent white spots.	Brown.
Shaft stripes	Broad, white.	Narrow, pale yellowish.
Wing coverts	Green.	Green, with brown tinge.
Back	Bright grass green, less brown on upper back	Bright green, more brown on upper back.
White spots on wing coverts and scapulars.	Absent.	Present.

In view of the above-mentioned differences and complete breeding isolation between them, I would treat *Megalaima zeylanica* and *Megalaima lineata* as two distinct species.

The Indian races of the two species will stand as follows :—

MEGALAIMA ZEYLANICA (Gmelin).

1. *Megalaima zeylanica zeylanica* (Gmelin).

Bucco zeylanicus Gmelin, Syst. Nat., 13th ed., 1, p. 4, 1788—Ceylon.

2. *Megalaima zeylanica inornata* Walden.

Megalaima inornata Walden, Ann. Mag. Nat. Hist. (4) 5, p. 219, 1870
—“Malabar, Coorg and Candeish,” hereby restricted to Malabar.

3. *Megalaima zeylanica caniceps* (Franklin).

Bucco caniceps Franklin, Proc. Zool. Soc. London, 1, p. 121, 1831—
“On the Ganges between Calcutta and Benares and in the Vindhyan Hills between the latter place and Gurrah Mundela on the Nerbudda.”

I agree with Ripley⁽⁴⁾ in not recognising Whistler and Kinnear's *M. kangrae* from Ranital, Kangra.

MEGALAIMA LINEATA Blyth.

1. *Megalaima lineata hodgsoni* Bonaparte.

Megalaima hodgsoni Bonaparte, Consp. Gen. Av., 1, p. 144, 1850—Nepal.

Megalaima lineata rana Ripley is differentiated on very slender characters. The Himalayan and the South-eastern Assamese populations measure :

Locality.		Wing.	Tail.
Western Himalayas—			
Hardwar, Dehra Dun District, U.P.	1 Male	135	77
¹ Kaladoongi, Naini Tal District, U.P.	1 unsexed	138	88
² Bajora, Dailekh District, Nepal.	2 Males	140.5-141	87-87.5

Central Himalayas—

³ Lower Central	4 Males	128-134 (131)	78-82 (80)
Nepal (Simra, Hिताura).	4 Females	128-138 (133.2)	76-85 (80.2)

Eastern Himalayas—

Sikkim to Northern Assam	2 Males	128-136	79-83
	3 Females	127-131 (128.6)	75-85.5 (79.1)

South-eastern Assam—

Khasia Hills	1 Male	134	81
Southern Sylhet and Cachar.	4 Females	128.5-135 (131.6)	77-85 (79.2)

¹ *Ex* Shelley, 1891, Cat. Bds. Brit. Mus., 19, p. 81.

² *Ex* Ripley, 1950, Proc. Biol. Soc. Washington, 63, p. 102.

³ *Ex* Biswas on Koelz collection (unpublished).

2. The population from the Simlipal Hills cannot be fitted in any of the known races of the species, and is herein described as

MEGALAIMA LINEATA KUTRU*, new race.

Description.—Similar to *M. l. hodgsoni* Bonaparte, but smaller and deeper colored; breast and nape chocolate brown; green much brighter on underparts.

Type.—Adult male, Chahala, Simlipal Hills, Mayurbhanj District, Orissa; February 13, 1951, Collector, B. Biswas.—Zool. Surv. India Reg. No. 27297.

* *Kutru* is a common local name for this bird.

Measurements of type.—Wing 125, Tail 77, Bill from skull 32 mm.

Measurements of other specimens —One Male, Wing 122.5, tail 78, bill from skull 33 mm. Three Females, Wing 126-132 (128), tail 77-79 (78), bill from skull 31.5-33.5 (32.3) mm.

I am indebted to Mr. B. Biswas of the Zoological Survey of India for helping me in working out the problem.

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(3) PETERS, J. L. 1948. *Check list of Birds of the World*, 6, pp. 32-33.

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Notices.

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SEPARATES.

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